REMARKS

Drawings:
The drawings have been corrected as suggested by the Examiner.

Claims:
All claims except claims 10, 11, 14 and 16-19 were rejected based on Kang in view of Hoang or based on Kang in view of Hoang and others. Applicants have further limited his independent claims to clearly distinguish the now claimed invention from the cited references. Applicants have added additional dependent claims related to specific features of their invention. Applicants request reconsideration of his invention in light of the more limited and specific claims.

Applicants have carefully reviewed the five cited references.

Kang describes a complicated scheme for choosing optical paths and backup paths to consume the least amount of wavelength bandwidth.

Hoang describes another extremely complicated scheme for operating an optical network based on a set of connectivity constraints such as quality of service.

Strat describes a transmitter and modulator arrangement for generating sub-carrier frequencies.

Yamada describes transmitter – modulator system for producing sub-carrier frequencies at 25 GHz spacings.

Tahara also describes a dense wavelength division experiment with 12.5 GHz spacings and 1000 channels.

There is nothing in these references that describe or suggest the unique features of the present invention. The invention is a network with a large number of nodes. The network is arranged so that data is transmitted between nodes on dedicated channels that are entirely optical and the information does not change wavelength until after it reaches its destination node. All electro-optical conversion and wavelength multiplexing and de-multiplexing occurs at the nodes or outside the node network. The invention includes a routing algorithm that assures efficient use of optical channels. In existing prior art networks information typically undergoes a large number of color conversions (wavelength changes) and/or electrical-optical conversions within the network before reaching its destination. The present invention provides a large network with no color conversions and no electrical-optical or optical-electrical conversions. This permits the network to handle enormous data rates, substantially errorless.

Conclusion

For all of the above reasons, Applicants request that the claims as modified be allowed

and that the application be allowed to issue as a patent.

Respectfully submitted,

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